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"THE STORY OF TERRACING"

Broadcast No. 14 in a series
of discussions of soil con-
servation in the Ohio Valley.

WLW, Cincinnati

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U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Dayton, Ohio

SOUND: Thunder, followed by rain...

ANNOUNCER

Fortunes Washed Away!

MUSIC: Fading...

ANNOUNCER

Two miles west of Wake Forest, North Carolina, lies a broad rolling farm. Trees stand out here and there. Fields of golden grain undulate before a summer breeze. In outward appearance, it is but another Piedmont farm. But to thousands of farmers, it bears a peculiar significance. It is the birthplace of the Mangum terrace.

MUSIC: Fading...

ANNOUNCER

In March, 1885, Priestley Hinton Mangum built his first broad-base terrace on the old farm. Like adjoining farms, it had been protected, after a fashion, with contour ditches. But with the advent of the wheat binder, hillside ditches had become a major obstacle. Either the binder or the ditches had to go, and Priestley Mangum was just stubborn enough not to give up his shiny new harvesting machine, and he was efficient enough not to give up erosion control. But everyone, including Mangum's freckled eight-year-old son and old Uncle Tom, was mystified at the strange doings on that March day when...

SOUND: Mule snorting, dragging a plow, clinking of harness.

UNCLE TOM

Haw! Whoa, now, while we gits this harness off.

SOUND: Flapping of leather, clinking of harness.

SOUND: Barnyard noises, continuing through following sequence...



UNCLE TOM

Git along now.

SOUND: Slap of hand on mule's rear.

UNCLE TOM

Hello, young Mister P. H. Bet you's gettin' powerful hungry.

P. H.

I dunno. What you been doing, Uncle Tom?

UNCLE TOM (Resignedly)

Yo'll haf to ax yo Par. I sho don't know. But we sho done tore up them hillside ditches. Here comes yo Par now.

SOUND: Clinking of harness.

P.H.

What you been doing down there, daddy?

MANGUM (Chuckling)

Why, P. H., we're building a terrace. I don't imagine that means much to you, does it?

P. H.

No.

MANGUM

We're building a terrace, so we can use the binder, and so the soil won't wash away.

P. H.

A terrace? Looks like nothin' but a row of dirt to me.

MANGUM

Perhaps that's what it is, young fellow. We just used those hillside ditches, plowing down the upper bank several times. We used a hoe once in a while. We let the lower bank of the ditch stay there. Why, Uncle Tom, I explained it all to you--just as clear as day.

UNCLE TOM

Ain't clear as day to me. Plumb foolishness, I calls it, Mistuh Priestley.

MANGUM

Young P. H. here won't think it's foolishness when he grows up. I'm building this farm to stay. Young fellow, some of these days you'll be building terraces, too...

MUSIC: Fading...

ANNOUNCER

Uncle Tom was bewildered at the strange ridge he was creating with a mule and a plow. So, too, were the neighbors. So, too, was a prominent North Carolina judge who visited the farm one Sunday evening during the early days of terrace building...

JUDGE

Strange doings, Mr. Mangum, strange doings. I'm at a loss to understand those irregular ridges which have torn up your fields.

MANGUM

I suppose so, Judge. Necessity is the mother of invention, an old saying--but true. You know that soil washing is ruining many of our farms. I'm determined that it shall not take mine.

JUDGE

Oh, I grant you that the loss of the soil is indeed a problem here in the Piedmont. I well remember the color of this land when I was a boy. It was gray. Now it is red. But these terraces...

MANGUM

Plainly, some obstruction in the soil itself is the only thing that will keep the water from charging down the hillsides with the speed of a millrace. I have thought about it very much, and I believe that a ridge of earth will do the job--a ridge so broad, and with gentle slope, that crops can be grown on it and machinery run across it without difficulty.

JUDGE (with finality)

Mr. Mangum, your terrace system seems to be a good thing, but it will die with you.

MUSIC: Fading...

ANNOUNCER

But terracing was not a passing fancy. Within ten years, Priestley Mangum's terrace system had been adopted and used by a large number of farmers who visited his farm to inspect the terraces and learn how to construct them. Once more, Mangum and the judge sat on the porch in the cool of a summer evening...

JUDGE

I must admit, Mr. Mangum, I am amazed at the rapidity with which your terraces have spread over the country. I can safely state that the popularity of these terraces is the pride of the town.

MANGUM

That pride is well placed, Judge, not because I had anything to do with spreading the terraces, but because farmers are beginning to take care of their soil. Water falling on a well-terraced field is so well handled that improvement begins at once. No water is allowed to run and begin to cut or denude the field. The water must always be moving through the soil.

JUDGE

A pretty picture, too. The whole field is cultivated as neatly as the most fastidious farmer might desire. Your fields are patterns of clean culture...

MANGUM

And the history of each one, under this new system, is one of increasing production with decreasing cost.

JUDGE

Mr. Mangum, you do not realize the great work you have given to this country. Your terrace is practical in parts of every state in the Union.

MUSIC: Fading...

ANNOUNCER

Priestley Mangum died in 1907, but his terrace system lives on. For years it has had an important role in American agriculture. The principle of terracing, modified and adapted to the climate and topography of various regions of the country, is today the most widely known and widely used method of erosion control. And Mangum's first terrace is still in existence on the old farm near Wake Forest, still doing the job for which it was devised. Old Tom, though he didn't know it, participated in an historic enterprise.

MUSIC: Fading...

ANNOUNCER

And now, here is Ewing Jones, your weekly spokesman from the Soil Conservation Service office in Dayton, Ohio.

JONES

Thank you, _____. You know, I almost missed my cue then. I was reading, and I don't suppose you'd be surprised if I happened, just by accident, of course, to be reading a bulletin on...

ANNOUNCER

Not terracing, by a coincidence?

JONES

Forethought is the word, _____. This bulletin is one of the later publications, too. It's "Terracing for Soil and Water Conservation." See for yourself.

ANNOUNCER

"Terracing for Soil and Water Conservation." Hmmm...but that drawing on the cover. I don't just see, why...

JONES

Uncle Tom didn't see, and the judge didn't see either, so you're not alone. But I'll explain. That's a drawing of a terrace system. And this bulletin is really one of the most comprehensive terracing bulletins I've seen. For example, over here it tells how to build a terrace. Right there.

ANNOUNCER

Oh, yes. That is interesting. I imagine that Priestley Mangum would have been glad to have had that bulletin.

JONES

No doubt. But Priestley Mangum was a pioneer. Farmers and state agricultural experiment stations and federal soil erosion experiment stations have improved on the Mangum terrace. This bulletin, "Terracing," should be a big help to lots of farmers, and to anyone interested in conservation. It's available for distribution, so just send a penny postcard, or a letter, and ask for the bulletin on terracing. Write to Soil Conservation, Dayton, Ohio.

ANNOUNCER

All right, Ewing. So much for the bulletin. Now?

JONES

_____, even though terracing is one of the most common soil-saving practices, I imagine that a good many people don't know a whole lot about terraces. I've asked Raymond Lester to come up here. Mr. Lester is an engineer on the Soil Conservation Service demonstration area in Robertson County, Tennessee, near Springfield. Also with us is Mr. John S. Maze, who owns a farm near Brownsville, Indiana, in Union County. So, we have an engineer who is an authority on building terraces, and a farmer who has built a few himself. The best way to get this discussion started, probably, is for me to back away discreetly, and leave the whole thing up to Raymond Lester.

LESTER

All right, Ewing. Now, Mr. Maze, suppose we get a few facts on the record. You've terraced part of your farm, haven't you?

MAZE

Yes, my farm is under cooperative agreement with the CCC camp at Brookville. I have a 52-acre field that is being terraced. Part of the terraces were built this spring, and some more will be built this fall. But even though I built them, there are still a few questions in my mind, and this might be a good time to get them answered.

LESTER

I'll be glad to help all I can.

MAZE

Now, my terraces are around 20 feet wide. Is that the usual size?

LESTER

Just about, Mr. Maze. Modern terraces are usually from 20 to 40 feet wide, depending on the steepness of the slope. The channel is usually wide and flat, the width, of course, again depending upon the steepness of the land.

MAZE

Well, now, most of the modern methods of erosion control are all built around the idea of cultivating on the level, instead of up and down hill. Take the Brookville camp area, for example.

Farmers are practicing contour tillage. They're putting contour furrows in their pastures. They're contour strip cropping their fields. But what I was getting at, is, why aren't terraces exactly on the level?

LESTER

They're almost on the level, but not quite, Mr. Maze. On much of the cultivated land, there would be danger of overtopping during heavy rains if you built absolutely level terraces--unless you built them very large,--and then, of course, it would be difficult for you to conduct farming operations with them. Then, too, level terraces would result in ponding of water and corresponding crop damage. The purpose of the terrace is to slow down run-off, permit more of it to soak into the ground, and conduct what water does go off the field in a slow, orderly way to a protected terrace outlet.

MAZE

Of course, I was fortunate that my farm was close enough to the Brookville CCC camp so that I could get the benefit of advice from the engineers there. But how about farmers that are away from such areas?

LESTER

Why, Mr. Maze, bulletins which give specifications for terraces can be secured from county agents or from state agricultural colleges; in your case, Purdue University.

MAZE

Then you'd advise any farmer who is interested in building a set of terraces on his fields to see his county agent to find out how he should go about it?

LESTER

I certainly urge any farmer who wants to place terraces on his land to get the advice of his county agent. Not all land is suitable for terracing.

MAZE

I know that. My farm is about 230 acres, and only part of it is to be terraced. And even the terraced field will be given other erosion control treatment. It will be cultivated on the contour, I'll follow a rotation of corn, wheat, and clover, and I'll fertilize and lime the terraces to build up the soil.

LESTER

That's looking ahead, Mr. Maze, and you're to be congratulated. We find that many farmers want to build terraces on land that has been severely eroded. They can see the effects of erosion on such fields, and naturally they want to do something about it. However, unless it is possible to terrace all the land, it's better to terrace the good land and use some other method of control on the more severely eroded areas.

MAZE

You think, then, that terraces alone are not sufficient to solve the erosion problem on all the farm land in the state.

LESTER

Definitely not! Terraces are not sufficient, just by themselves. And I'm glad you brought out that point. You mentioned it a moment ago when you told how you were treating your terraced field. In the first place, as I've indicated, not all sloping land can be terraced. On land that cannot be, some other method of erosion control must be used. That's especially true in southeastern Indiana.

MAZE

Well, terracing may not be the whole solution to the soil erosion problem, but to me it's a mighty important part of the program.

LESTER

I'm glad to hear you say that, Mr. Maze. The farmers down in Robertson County, Tennessee, will agree with you. As a matter of fact, farmers cooperating with the Soil Conservation Service in Tennessee have terraced something like 7,000 acres in the past year, and the number is increasing every day. But now, back to Ewing Jones.

JONES

Thank you, Raymond Lester, and my thanks to you, Mr. John S. Maze, of Union County, Indiana. Lots of other farmers are finding that well-built terraces can save wagonloads of soil in a few months of operation. Now, _____, you know that 4-H clubs in practically all of the states here in the Ohio Valley are taking up soil conservation quite seriously. Well, here's what happened at Xenia, Ohio, just the other day...

SOUND: Door slamming.

FARMER

Oh, hello, Buddy. Home already?

SON

Yeah. Just got off the school bus. And look what I got.

FARMER

Let's see, son. Oh, a bulletin. "Terracing for Soil and Water Conservation." That's a pretty big bulletin for a young fellow like you, isn't it?



SON

It's nothing to what I'm going to do. We've started a 4-H Soil Conservation club, and I'm taking terracing as my project.

FARMER

Now, wait a minute, Buddy. Don't tell me you're going to terrace the farm!

SON

Maybe not just now, but I'm sure going to learn all about terraces.

FARMER

The fellows from the CCC camp were talking to me about terracing the other day. That south forty ought to be terraced, they tell me.

SON

I'll bet you can find out all about it from this bulletin.

FARMER

Now, perhaps I can, at that. Where'd you get it?

SON

I got it at school. Our agriculture teacher got it for me. He said it was published by the United States Department of Agriculture, and anyone can get a copy just by writing to Soil Conservation, at Dayton.

MUSIC: Fading...

ANNOUNCER

Yes, Buddy was right. If you would like a copy of the bulletin, "Terracing," write to Soil Conservation, Dayton, Ohio. Next week, "The CCC Fights Erosion."

SOUND: Thunder, followed by rain...

ANNOUNCER

This is an educational presentation of the Nation's Station.

